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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/683,533	01/16/2002	Joel A. Kubby	111014	7731

27074 7590 07/30/2003

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EXAMINER
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DANG, TRUNG Q

ART UNIT	PAPER NUMBER
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2823

DATE MAILED: 07/30/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application N .

09/683,533

Applicant(s)

KUBBY, JOEL A.

Examiner

Trung Dang

Art Unit

2823

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) 1-6 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 7-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_ 6) ☐ Other:

Art Unit: 2823

1. Applicant's election with traverse of claims 7-20 in Paper No. 5 is acknowledged. The traversal is on the ground(s) that there are 18,460 patents have issued classified in both class 438 and 257, and that the Examiner has, at least partially, already searched class 257 as evidenced by a listing of U.S. Pat. No. 5,583,373. This is not found persuasive because:

a) The fact that there are 18,460 patents have issued classified in both class 438 and 257 and that the Examiner has cited a patent classified in class 257 does not constitute a rule of which the examiner is obligated to examine both method claims and device claims.

b) As noted in the restriction requirement set forth in the Office Action paper no.3, The Examiner has shown that inventions I and II are distinct by clearly showing that the alternative method proposed by the examiner would be distinct from the process claimed. Additionally, the search is not coextensive as evidenced by the different fields of search for the process and product as cited in the previous restriction requirement. Furthermore, applicant has not provided a convincing argument that the materially different processes would not be suitable in producing the claimed device.

The requirement is still deemed proper and is therefore made FINAL.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless:

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 7-10, 12-17, and 19-20 are rejected under 35 U.S. C. 102(b) as being anticipated by Diem et al. (U.S. pat. No. 5,510,276).

The reference teaches every limitation of the claimed invention in that it discloses a process for making a microtransducer ( a micromachined device) which comprises the steps of: forming a substrate 6; forming an insulation layer of silicon oxide 42a over the substrate (fig. 12 and related text); forming a silicon layer 50a over said insulation layer (fig. 13 and related text); forming a strain gauge 52 (a silicon structure) in said silicon layer (fig. 14 and related text); and forming a gap 16a in the insulation layer that isolates the silicon structure 52 from the substrate, wherein a surface of the substrate under the gap in the insulation layer is maintained substantially unetched (fig. 17 and col. 11, lines 54-60). Note that the oxygen implantation step depicts in figure 12 results in the claimed forming a substrate and forming an insulation layer over at least part of the substrate. It is further noted that amended independent claims 7 and 14 use "comprising" format,

Art Unit: 2823

which do not exclude the sealing step of gap 16a with insulator 24a, hence Diem's teaching up to the step of etching oxide layer 42a via opening 26a (figs. 15-16) read on every step of the claimed invention including the claimed limitation regarding the gap that remains at least partially open. Also noted that although the reference does not specifically disclose that the gap 16a is partially thermally isolated the silicon structure from the substrate, such is held inherent because gap 16a is identical to the claimed gap, i.e., both are air gap.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 18 are rejected under 35 U.S. C. 103 (a) as being unpatentable over Diem as above.

Diem teaches a process as noted above, differing from the claims in not disclosing the etch selectivity of about 20:1 or greater as claimed. However, absent a showing of criticality by applicant, the selection of the claimed selectivity would have been obvious to one of ordinary skill in the art since it has been held that, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable range by routine experimentation. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980); In re Sola 25 USPQ 433 (CCPA); In re Waite 77 USPQ 586 (CCPA).

4. Applicant's arguments filed 5/9/03 have been fully considered but they are not persuasive.

Applicant's argument with respect to the gap that remains at least partially open as now claimed is moot in view of the new grounds of rejection noted above.

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2823

6. This application contains claims 1-6 drawn to an invention nonelected with traverse in Paper No. 5. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Trung Dang whose telephone number is (703) 308-2548. The examiner can normally be reached on weekdays from 9:00 AM to 5:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Olik Chaudhuri, can be reached on (703) 306-2794. The fax phone number for this Group is (703) 305-3432 or (703) 308-7725.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-0956.



Trung Dang  
Primary Examiner